DOCUMENT RESUME

ED 389 223 FL 023 443

AUTHOR Seliman, Salbiah
TITLE Engineering Research Presentations: Three Units of Analysis.
PUB DATE 95
NOTE 29p.; Paper presented at the Annual Meeting of the Teachers of English to Speakers of Other Languages (29th, Long Beach, CA, March 26-April 1, 1995).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Coherence; Discourse Analysis; *Engineering Education; English (Second Language); *English for Special Purposes; Foreign Countries; Language Patterns; *Language Styles; *Oral Language; *Speech Communication; *Technical Writing

ABSTRACT

A study investigated the genre, structure, and delivery of oral presentations in engineering delivered in English as a first and as a second language. Eleven manufacturing engineering presentations, four by non-native speakers of English and seven by native speakers in Loughborough, United Kingdom, were analyzed with reference to the discourse community's expectations concerning "good" and "bad" presentations, as determined through interviews and questionnaires. Two aspects of genre were examined: communicative purpose and conventionalized knowledge of linguistic and discoursal resources. Analysis of structure focused on characteristics of the introduction, body, and termination (conclusion) of the presentation. These included listener orientation, content orientation, discourse type, summary, presentation of technical information, use of visual aids, circumstantial comments, and comments on the research process. Analysis of delivery looked only at its extemporaneousness, as reflected in mode of delivery: memorization; reading aloud; and/or "fresh talk." In each case, performances are compared with expectations. Contains 35 references. (MSE)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 389 223

Engineering Research Presentations: Three Units of Analysis

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Salbat Selman

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

FL 023443

BEST COPY AVAILABLE

Engineering research presentations: Three units of analysis

Salbiah Seliman (Until May 1996): CELT, Airthery Castle, Stirling University, Stirling FK9 4LA Scotland UK; (After May 1996): Department of Modern Languages, University Teknologi Malaysia, Skudai 80990 Johor, Malaysia.

Abstract - This is an in-progress qualitative study of the genre of Engineering research presentations. The analysis techniques are adopted from previous studies done by Dubois (1980a, 1980b) and Weissberg (1993), backed-up by genre analysis frameworks developed by Bhatia (1993), Swales (1990) and Bakhtin (1986). Three units dealt with are the *genre*, *structure* and the *delivery* of engineering research presentations. Main factors covered under *genre* are the Discourse Community's DC) communicative goal and conventionalised knowledge of linguistic and discoursal resources and under *structure* are the Introduction - Body - Conclusion organisation. Discrepancies between the DC's beliefs and actual practices are pointed out under *genre expectations* and native - non-native comparisons are made and directions of further study are shown.

Studies on genre has become more and more popular in ESP (English for Specific Purposes), especially studies on the genre of written research reports. Swales's (1981) study on article introductions, Cooper's (1985) study on aspects of article introductions in IEEE publications, Crookes's (1986) study on scientific text structure and Dudley-Evan's (1986) investigation of the introduction and discussion sections of M.Sc. Dissertations and Peng's (1987) study on organisational features of chemical engineering research articles, are some of these. Publications on the framework of genre analysis of English in academic and professional settings (Swales 1990; Bhatia 1993) prove this popularity further. However, these studies are on the genre of written discourse. Very few works are devoted to the study of oral discourse as genre. The scarcity of studies on oral discourse as genre is well expressed by Dubois (1986:7) indicating that '...literacy well nigh wiped out oracy...', by Shalom (1993:37) who pointed out that attention has been paid to the written forms but

not to the spoken research process genre; and by Weissberg (1993: 24) who indicated that thesis/dissertation defence and graduate seminars have not been examined as genres.

Researchers who pointed out the dearth of studies on oral discourse in academic and professional settings (Dubois 1980a, Shalom 1993 and Weissberg 1993) are among those few who have described their chosen monologues as genres. Shalom (1993) described poster presentation as an embryonic research process genre; Dubois (1980) described biomedical speeches under *structure* and genre . Weissberg (1993) described the graduate seminar by pointing out the *speech events* , and its discourse community's *genre expectations* . He studied the speech events by adopting Saville-Troike's (1982) speech event components: genre, topic, purpose, setting, participants, message form, message content, act sequence, and rules for interaction (Weissberg 1993:.24); the genre expectations were studied by comparing what their professors expect of them and what actually took place.

In this paper, I will report three units of what I have observed in my attempt to analyse 11 manufacturing engineering research presentations under the subtopics of *genre*, *structure* and *delivery*. Of these research presentations, 4 are non-native (NN) and 7 are native speakers (NS). Genre expectations are discussed in relation to the discourse community's (DC's) beliefs on what constitute 'good' or 'bad' presentations and what actually took place in actual presentations. N-NN comparisons will be made where necessary. Finally since the research is still in progress, what needs to be done to complete it will be discussed briefly.

The corpuses consist of field notes, a total of 11 research presentations by 12 N and NN presenters and 24 questionnaires. The various types of corpuses were gathered during the Tenth National Conference on Manufacturing Research that took place at Loughborough University of Technology, Loughborough, Leicestershire, UK from 13 - 15 September 1994.

The *Engineering* discipline is the 'professional art of applying science to the optimum conversion of the resources of nature to the uses of humankind' and 'a creative application of 'scientific principles to design or develop structures, machines, apparatus, or manufacturing process...' (*The New Encyclopaedia Britannica, Knowledge in Dept,* 1993:414) This definition highlights the applied nature of engineering discipline and this is reflected in the nature of the research presentations being analysed

The methodology used for this research was mainly Participant Observation (Jorgensen 1989). The scope of the analysis ran from the beginning of the presentation to the end, excluding the chairman's introductory remarks and the question and answer session as these require separate treatments. The research presentations were first transcribed, then analysed using similar techniques of analysing spoken discourse (Dubois 1980a; Weissberg 1993), backed up by genre analysis frameworks (Bakhtin 1986; Swales 1990; Bhatia 1993). (See *Appendix A* for transcription symbols). As I have attended more than one engineering conferences, factors which recur among conferences will be pointed out; otherwise all other data presented here are from the Manufacturing Engineering Conference

Genre

The genre of the Engineering presentations will be discussed based on the definition of the term *genre* given by Bhatia (1993:16). He defined *genre* as an instance of 'specific communicative purpose using conventionalised knowledge of linguistic and discoursal resources'. In the definition, there are two factors which need clarification in the context of engineering research presentations: *communicative purpose* and *conventionalised knowledge of linguistic and discoursal resources.*

Communicative purpose of giving Research Presentations

If we study the definition of the term *genre*, we will find that *communicative goal* is the controlling factor. Both Swales (1990:46, 58) and Bhatia (1993:16) put emphasis on the

communicative purpose or goals in their definitions of *genre*. It would be helpful perhaps to know first, what is or are actually the Engineering DC's communicative goal(s), of having conferences. According to some of the informants in one informal interview, a presentation is to 'inform the audience that such and such a research is being done'. This interview statement seems to correspond with the questionnaire responses to a question: *What is (are) the goal(s) of having conferences in your field?* From 24 respondents, *Disseminate information* got 21, *Establish contacts* got 17 *Get recognition* got 10 and *Sell services* got only 8. (Each informant was allowed to answer more than one). *Disseminating Information* seemed to be the most popular response, followed by *establishing contacts.* Although *disseminating information* does not mean exchange of information, *establishing contacts* brings about information exchange. The two related categories merit more votes than the other choices. This questionnaire was in fact piloted and used in other engineering conferences prior to use in the Manufacturing Engineering Research Conference, and the result seemed to point to the same direction. While the goals of individuals who attended the conference may differ, the goal of organising conferences and therefore the goal for giving research presentations at the DC level was quite clear.

DC's Conventionalised knowledge of linguistic and discoursal resources:

While *communicative goal* is the controlling factor in a genre, the *conventionalised knowledge of linguistic and discoursal resources* is the medium to achieve the communicative goals. I will discuss the DC's conventionalised knowledge of linguistic and discoursal resource in relation to their tacit beliefs on what constitute 'good' or 'bad' research presentations.

The DC's beliefs on what constitute 'good' or 'bad' research presentations.

Some of the DC's beliefs on what constitute 'good' or 'bad' research presentations are summarised below, leaving out duplicates in

terms of ideas and expressions but keeping various different ways of expressions on more or less the same phenomenon. Original expressions used by the respondents are kept as much as possible. They are categorised into themes, arranged in alphabetical order. The themes were adopted from Lapakko (1989):

Criteria of 'Good' Presentations:

Content: Well focused; Set a clear context; Least relevant ideas/ details/complex ideas left out; Cover just main points - not everything you have done; Take some as example to illustrate and leave out the rest; Clear concept; Brief but clear, concise.
Delivery: Simple and clear; Good steady pace; Strong voice; Good structure; Loud delivery; Spontaneous (doesn't read from text or overheads directly).
Time: Finished on time; Covered all the main points in the allowed time/ could cover the entire paper

Criteria of 'Bad' Presentations:
Audio-visuals: Too many
Content: Too large subject coverage in short time,
Delivery: Speed of delivery fast,
Time: Insufficient time for questions

Those were some of the questionnaire responses on the DC's beliefs in what constitute 'good' or 'bad' presentations. I will discuss these 'beliefs' in relation to what actually take place in actual presentations later when I discuss **Genre and Genre Expectations.**

The DC's beliefs on what constitute 'good' or 'bad' research presentations was found to be tacit or covert in nature. From conversations and questionnaire responses, I found that the DC was not aware that there was any 'conventionalised pattern' in their research presentations. In the questionnaire, to the question: *Do all the presenters have to meet certain standardised rules'*, 16 out of 24 respondents voted *no*, only 4 voted *yes* and 4 did not answer. To another question: *How do the Engineering community*

members attempt to pass down their standardised presentation rules to the juniors the responses varied from *They don't* or *No attempt is made whatsoever* to *... little effort is made to educate people in the field of oral presentation...individual styles are only developed through practice* to *Chairman meets with presenter in some cases...* to *Sometimes by incorporating presentational exercises into degree courses.* Another question related to this matter was asked: *Who determine(s) the skills to be acquired by new presenters*, responses were also varied: some said *No one insists on skill acquisition* or *No one determines skills to be acquired by new presenters* but some others choose the multiple choices given. Those who chose the multiple choices given, majority of the respondents (9 out of 24) chose *themselves*, 4 chose *peers*, 4 others chose *superiors*, 3 chose *senior members of engineering community*, only 2 chose *organisers*, two did not answer. If we study the responses to the questions, we would find that it would either be *themselves* or, their *peers*, or their *superiors* who determine the skills to be acquired by new presenters. On the one hand there was 'no standardised rules', 'no one insist skill to be acquired by new presenters' and therefore 'no attempt to pass down these rules' , on the other hand the 'organisers', or 'senior members', or 'superiors' or 'peers' or at least 'themselves' determine some kind of skills to be acquired by new presenters.

So on one hand the DC members are not sure if there is any 'conventionalised' pattern, on the other hand, audience and presenters, especially presenters rated as 'good', have indicated some criteria of 'good' research presentations, which could be considered as something 'conventionalised' because if most of the respondents agree on the same responses, and if what they claim in conversation and questionnaires were true, and these phenomena could be verified to be true, they are 'relatively stable types' (Bakhtin 1986). If we agree with Bakhtin, these relatively stable types could be considered as styles and 'where there is style there is genre' (Bakhtin 1986: 66).

Structure

The second unit of analysis to be discussed is the structure which can be described using the traditional terms of INTRODUCTION-BODY-CONCLUSION, what Goffman (1981:175) termed as 'text brackets' to allow alternate footing: the introduction and the conclusion are considered as the bracketing phases and are delivered 'in slightly different voice from the one employed in the body of the text itself.'. Dubois (1980a) reported on the structure of biomedical speeches using the same terms, except, instead of calling it *conclusion* she called it *termination* because the latter could accommodate content orientations and listener orientation, whereas 'conclusion' could only accommodate content orientation, which consists of *summary* and *conclusion*. So the term *termination* is used below. In addition to Dubois (1980a), there are 'other' publications which report on the structure of oral presentations using similar terminology. However, they are based on the writers' experience and not based on empirical research and could be contrary to the observed pattern. Nevertheless, they used the same terminology. One type of these 'other' publications are those which reported on oral presentations related to classroom applications such as those by Hyland (1991), Zawadzki and Saunders (1990), Schofield (1988), Nesi & Skelton (1987) and Soulliard & Kerr (1987). Another type of these 'other' publications are the 'how-to' or 'hortatory' publications directed especially to NS speakers, citing only these in connection with Engineering, such as those by Kenny (1982), Saunders (1993) and Orr (1993). Using the same elements as found in the preceding sources, the structure of the manufacturing engineering research presentations can tentatively be described as follows, brackets () indicate unobligatory items.

A. INTRODUCTION
    1. (Listener orientation)
        (To the chairman)
        (To the audience)
            (Greeting), (Self introduction: Name, affiliation experience) (Promise to be brief), (What equipment to use).
    2. Content orientation
        (Title of presentation)
        Outline of presentation

B. BODY

Visual pointers 1 -20 or more

Hortatory/Narration/(Other modes: See explanation)

C. TERMINATION

1. (Time Check)
2. (BODY continued)
3. Content Orientation
   - Summary of points/ Tie up
   - Possible Application/ Future Work/ Future Developments
4. Listener Orientation
   - Thank You/Signal End
   - Invite Question/(Invite Contact)

INTRODUCTION

The introduction is typically preceded by the chairman's biographical introduction, the speaker taking his/her stand at a position usually depending on whether he/she is going to use slides or transparency. Except during the opening ceremony, no presenters used a microphone, so right after these preceding speech acts, the presenter usually entered the listener orientation phase which was non technical. *Non technical* here refers to what Goffman (1981:175) termed as the bracketing phases explained earlier, the part of the discourse which does not yet contain the engineering content. Put it in another way, it is the part of the presentation which globally exists in any speeches which include engineering and non-engineering presentations.

Listener orientation

The listener orientation was normally directed to two parties: to the chairman and to the audience. This normally marked the beginning of the presentation. Presenters used both formal (Text 1 and Text 1.1) and informal forms (Text 2 and Text 2.2) when they directed their listener orientations to the chairman and to the audience. And with the presence of the word 'well' which is informal B2's listener directed to the audience becomes a mixed form. (See *Appendix B* for the list of research presentations being analysed).

To the chairman:

(Text 1) Thank you very much + (B2), or

(Text 2)Well + thanks Tony + (C8).

To the audience:

(Text 1.1) Good afternoon ladies and gentlemen + (R7).or

(Text 2.2) Well + good afternoon ladies and gentlemen +(B2).

Only one (B2) of the 8 NS in the samples distinctively directed her listener orientation to the audience, although all the 3 NN speakers (R7, J10, H11) did so. (The other NNS, H4), did not have to speak at the INTRODUCTION stage since he was the second speaker in a team presentation and thus did not have to have listener and content orientations). The other NS presenters did not have the listener orientation directed to the audience perhaps because of more pressing needs to go on to making circumstantial comments, which will be dealt with under 'NO FIXED ORDER'. Skipping the listener orientation is one way of catching up with the 20 minutes allotted time. Greeting, self introduction, promise to be brief and what equipment to use were all optional perhaps as a strategy of catching up with the time given. One presenter (H5) could not finish his talk perhaps because he was the first presenter in the session and he had difficulty in starting himself off. This could be traced in the following factors:

1. He gave biographical information although the chairman had already read his biographical statements;

2 There were at least two 'bracket information", to use Hatch's term (1992) or 'parenthetical remarks' to use Goffman's (1981:176) term.

3 An exchange was also found in the introduction. By 'exchange' I mean the instance when the presenter has a 'dialogue' with the audience. For instance H5 asked: 'How many of you have...' and the audience responded.

But H5 had this exchange in the introduction and it could be too early, compared to B2 and S9 who could finish the oral presentations although they also had exchanges. Nevertheless, B2

and S9 had no bracket information and had only one exchange each, and each occurred towards the middle of the presentation and not as early as in the case of H5. Although Goffman (1981:177) believes parenthetical remarks qualify, amplify and editorialise a speaker's talk, in the case of engineering research presentations, they had to be used cautiously and sparingly. Too many of these will considerably delay the presenters' attempt to deliver the actual content of the presentation, as could be observed in the case of H5. Of the eleven presentations being analysed, he was the only one who had difficulty in starting himself off and was the only one who could not complete his presentation. One presenter, S9 skipped thanking the chairman and skipped greeting the audience, perhaps due to thinking of the presentation itself and wanting to save as much time as possible, and went straight on to the next phase, content orientation.

Content Orientation

Content orientation seemed obligatory. Speakers who skipped the Listener orientation did not skip content orientation. There were two levels in this orientation: The title of the presentation and the Outline of the presentation. The title was typically expressed in one statement but the outline could take more than one statements. While the title could be skipped, the outline of the presentation was a must, as proved by the same speaker (H5) who could not finish his presentation. This is illustrated in the following quotation. (**Bracket information** are in bold; *outline* of the presentation in italics):

In all the +++ However +++ Em + with regards to the + subject of the paper + I shall be talking er + about + **well I should be giving you the list ( ) I expect to do that ( )** + *First of all, + I'll be talking about the background ... Why I think that the current work + is important* |+ *Secondly I'll be talking about, + intelligence formalism* |+ *...Then I shall er, + go on I shall present to you some er + examples of I'll try to combine and some of what I've been doing by using ...+ And then go on to the to the various subjects manufacturing* |+ *And finally what I see in the in future* |+

He perhaps suddenly realised that he needed to proceed quickly, and decided to skip mentioning his title. This is acceptable since the titles of the presentations in the corpus were found in the programme, in the slides or transparencies and were announced by the chairman. For the entire introductory section, the outline of the presentation seemed to be the first obligatory section of the entire presentation.

BODY

The body of the research presentations consisted of the expansion of the points enumerated in the outline, which was also called typically by NS as *objectives* but as *contents* (R7) or *aims* (J10) by NNS and typically accompanied and illustrated by slides and/or transparencies. The body of engineering presentations consisted of visual pointers, accompanied by many modes, two of which were hortatory and narration. (Further discussions on *visual pointer* are found under *NO FIXED ORDER* below). In this article the two modes mentioned earlier are described using what Dubois (1980a) has used, Longacre's (1974:358) characteristics of discourse genres. Example A illustrates *hortatory* and example B illustrates *narration*:

Example A: Hortatory (C8):

And here we have + em, + a 39 plug ( ) and I say that *if* **you** want to design a new one of these + and **you** want to get a feel of what it look like + and also make sure that it fits all the standard measurement such as the pins |+

Example B: Narration (B2): To compare er + a number of modelling methodology which are available with a number of characteristics that **we** were looking for |+ Em + **I** just used a + very er + amazing technology to make it to actually see ( ) er + ( ) **We** set up a number of methodology that are available + And + a checklist is by no means er + extensive + **I** will pre-admit that **we** are not comparing ( ) but it essentially start em er + investigation ( ) + We had problem to arrive at a few techniques + on which **we** did a local service in little of those **We** found that very often they are using very common elements one or another +

The modes illustrated in examples A and B matched Longacre's (1974:358) description of these modes according to parameters: Parameter 1 refers to *person*. (Indicated by bold in Examples A and B) Longacre describes narrative to be typically in first or third person and this matched Example B where (B2) used *We* and *I*.. Hortatory employs non-specific person but indicated that *you* is also used (1974:360). In example A, C8 used *you*. Parameter 2 refers to *orientation* : Longacre described narrative to be mainly actor oriented and hortatory to be addressee oriented. In Example A, the presenter focused on *you* the addressee. In Example B, *I* and *we* are the deep structure agents as subjects. Parameter 3 refers to time: Narrative is described as encoding accomplished time and in hortatory the commands and suggestions are expressed as imperatives. Example A contains imperatives (underlined) and the first part of the imperative (not underlined) is softened by the word *if* (in italics). In Example B the verbs, (underlined) are in past tense. The imperatives and the past tense verbs qualify themselves with parameter 3 described by Longacre (1974:361). Lastly, parameter 4 deals with linkage: Narrative (Example B) had chronological linkage and hortatory (Example A) had logical linkage.

TERMINATION

The termination phase typically began with a time check whether by the presenter or the chairman. After the time check, the speaker either continued a little with the content which was presented as in the BODY of the presentation, or straight away began with the termination proper by entering the content orientation either by summarising the main points and/or by giving a short tie up and/or describing possible application and/or future works and/or future developments, in no fixed order. This is typically followed by the listener orientation which consisted of a ritual 'Thank you' or just an end signal, as in C6: "This is the end of my presentation +" with or without invitation for questions and/or contact. If the presenter did not invite questions, the chairman typically invited for him/her, but if the presenter did not invite contact the chairman did not do this for him/her.

In the structure described above, technicality began when the non-technicality ended. The non- technicality of the presentations began when the presentations began, and ended when *content orientation* began in the INTRODUCTION. Simultaneously, technicality began at this point and will only end at the *listener orientation* of the TERMINATION, after which non-technicality takes place to the end of the presentation.

NO FIXED ORDER

The structure of the presentations consisted of fairly fixed order, but there are also elements which did not have any fixed order. They consisted mostly of what Goffman (1981:181) called 'parenthetical remarks', or what Weissberg (1993:28) called 'conversational elements'. Weissberg (1993:28) pointed out five instances of conversational elements which make the seminar presentations he was analysing qualify as 'fresh talk' (Goffman 1981: 171): Topic shifters, Advance Organisers, Asides, Slide pointers, and Comments on the experimental process. While some of these conversational elements also occur in my data along with others, I will describe only three conversational elements which demonstrate the DC's conventionalised knowledge of especially the discoursal resources: Visual pointer, Comments on the experimental process and Circumstantial comments. Although these 'conversational elements' did qualify the presentations to be 'fresh talk' (Goffman 1981: 171), they are chosen to be dealt with because of the conventionalised knowledge of, especially, discoursal resources they depicted.

Visual pointer: Visual pointers can be defined as the first phrase or sentence uttered by the presenter to introduce the visuals being used. I would like to continue by first indicating the change in term. While Weissberg's term shows that the visuals used are 100% slides, as in Dubois's (1980a, 1980b,1982), 'Slide pointer' has to be changed to *visual pointer* to cater for the actual visuals being used: slides and overhead transparencies. Even though Shalom (1993) indicated engineering presentations are

accompanied by transparencies, no mention of slides, typical of visuals used in all the engineering conferences I have attended are both slides and transparencies. Second I would like to point out that there was no listener orientation directed to the projectionist as found by Dubois (1980a, 1980b), since typically, all visuals in the Engineering presentations being analysed were self manned. Of all the eleven presenters being analysed, only one (B2) used **both** slides and transparencies. Although she did get somebody to project the slides for her, she did not use such regulatory language. Thus they only have visual pointers. Visual-pointers occurred anywhere in the presentation, although typically occurred in the BODY of the presentation. Visual pointers seemed to be at a continuum of direct on one end to incidental on the other. The signal of the coming of visual ranges from incidental:

(H5) ((Visual 1)) Put on the + er + the title of the slide + what I am talking about +

to a more obvious:

(B2) Em + ((fixing visual 5)) ... This is the sort of process ( ) +

to even more obvious:

(C8) What about ((Visual 6 - Turbine Wheel)) this? This a + is a little turbine wheel +

or

(C8) ( ) look at a very simple model ((Visual 11 Slide: plug)) And here we have + em + a 39 plug ( )+

When a visual pointer occurred in an introduction, for instance as shown above (H5: Visual 1), the visual pointer was observed to be more incidental, but if it occurred in the body of the presentation (Visual 5 and 6), it was phrased more obviously. This could be because the body of the talk is supposed to be the main situation

of the content which deserved the visuals most. The content of the presentation seemed to be the most important part of the presentation, then delivery. As Goffman (1981:166) reminded us 'the subject matter is meant to have its own enduring claims upon the listeners apart from the felicities or infelicities of the presentation'. This is so too in the case of the eleven engineering research presentations I have analysed, based on the number of visuals used in the presentations being analysed. Since visuals in engineering research presentations display the content of the presentations, it is good to mention that in each of the presentation being studied, most of the visuals each presenter used, are shown at the body of the presentation. The number of visuals being used by the speakers in 20 minute presentations ranged from 8 to 22 and those used in the body of the presentations ranged from 5 to 17. But the content of this part is the least analysable by applied linguists because of its highly technical nature.

But the setting of the presentation, as envisaged by the presenter at the preparation stage, would require visuals to be used at other stages as well: introduction or the conclusion, hence the occurrence of the visuals anywhere in the presentation, clearly demonstrated the dependency of the engineering presenters on visuals, and this makes others, for instance Olsen and Huckin (1990:35) describe engineering lectures as relying 'heavily on visual materials.'

Circumstantial comments: Another conversational element, which was not mentioned in Weissberg (1993) and emerged in my data was Circumstantial Comments, which seemed to emerge anywhere in the presentation, whenever some of the following circumstances arose: having no time to lose (G4), question mark in title (B2), failure of equipment (C6, C8), relationship of present topic with those presented in the same (R7, H11) or different conference (S9) and the element of confidentiality (B2), to name a few. I will however deal with only one of these: the element of confidentiality, because this element seemed to recur from the previous two engineering conferences I have attended and was

reinforced by some specialist informants. The members of the engineering DC seemed to have a tacit understanding of this element. It was observed that the speaker as well as the audience, understood this 'conventionalised discoursal knowledge'. As engineering research deals with creating something new, something commercial, presenters who are also the researchers in this field are to be careful not to reveal certain information. In the middle of a presentation, one presenter was heard saying,

(B2)Em + ((fixing Visual 5)) ( ) This is the sort of process ( ) This is the highest level I+ I've removed all the identification we put left here ( ) is er + security ( )+

In another Engineering conference which involved many industries and business corporations that I have attended, presenters made this element of confidentiality more clearly. But the most important observation here is that it recurred in this particular Manufacturing Engineering Conference. This inability to present to the utmost clarity seemed to be accepted by the DC members because of this limitation.

Comments on the research process

First on the term being used. As in the case of *visual pointer*, this term was derived from Weissberg's (1993) *Comments on the experimental process* which had to be changed to *comments on the research process* since not all engineering researches were found to be experimental in nature, unlike Weissberg's and Dubois's (1980a, 1982) data. It was found that of the 11 Manufacturing Research presentations that I have analysed, very few comments on the research process or on the experimental process were heard. The presenters mainly gave the substance or the material and in many cases, I could not tell where the findings were because there were no such indication. Instead, most of the substance presented were application in nature, for instance from (S9):

((Visual 14 - Third from the concluding Slide)) Now + hopping back to + my initial slide + em + ( ) my belief is that companies like British

Airspace + that enormously used QFD ( ) and + I'll talk a little bit what QFD + is but the way I + tested this QFD is by + ( ) British Airspace + and they + are + in the competition to design and build light aircraft |+ And ( ) I suggested that they used QFD + from the very start to help them design its aircraft |+ And they + ended up in a month old design +

Could this be due to the nature of the engineering discipline itself? As pointed earlier, engineering discipline is applied in nature, unlike biomedicine, the content of the slide talks analysed by Dubois (1980a, 1980b, 1982) and applied life sciences (animal science and agronomy) analysed by Weissberg (1993). And as pointed earlier, Manufacturing Engineering is a recent branch of Mechanical Engineering. While the latter per se would be more core in nature, the earlier is more applied. This might explain why there are more comments on application than on experimental or research process, even in the BODY of the presentations.

Another reason for the lack of comments on experimental or research process is perhaps due to the greater authority exercised by the presenters on the content of their engineering research presentations. As indicated earlier, narration and hortatory were two of the modes that were identified in the BODY of the presentation. This might have connection with the question of authority. Only two (B2 and R7) of the eleven presentations being analysed made comments on the research process and both of them were found to be using narrative mode when making these comments. Both were from the same university. One (B2) was found to be humble throughout the presentation, for instance she said:

Before that I didn't do that very well but I mean to illustrate it as much as anything +.

The other speaker (R7) was a research assistant (from biographical statements read by the chairman and in his self introduction) and he was a NN who could be culturally less authoritative, since he is facing the widely NS audience. Comments on experimental or research process will inevitably depict the

person who makes mistakes rather than the personae who is objective and flawless. The 'person' refers to 'the self' as opposed to personae 'the created personality' (Campbell 1975: 405, 394), and this has been explained by Dubois (1980a) who pointed out that in the biomedical slide talks she analysed, the speaker oscillates between the personae and the person, and in RA (research articles) the persona looms larger than the person, but in the slide talks the characteristics of the person can be traced. The lesser instance of comments on experimental or research process in engineering research presentations could be due to the fact that the personae has to loom large without having to show the true self at all. Cooper (1985) who analysed RA published in IEEE (Institute of Electrical and Electronic Engineering), found that the RA she analysed were not in total congruence with that of Swales's (1981), and this was suggested by Dudley-Evans 1986) that it could be due to rapid development of the field of electrical and electronic engineering which made it leave out the research tradition and that the emphasis is more on product rather than in process. This phenomenon is further highlighted by Dudley-Evan's (1986) comments on Peng (1987:90) who found the relatively high frequency of the move called *Deductions* which, if occurs at the end of an entire discussion answers the main research question raised in the introduction. Dudley-Evans (discussed in Peng 1987:100-101) suggested 'authors of Chemical Engineering papers are more confident about making definite statements related to their work' perhaps due to the more stable variables (equipment and non-living substances) compared to those in medicine and biology who are dealing with changing variables (living organisms). Thus this relatively less occurrence of comments on the research process could be due to similar authoritative stance of engineering DC in revealing research results.

Delivery

Delivery reported here deals with only one aspect: the extemporaneousness of the delivery. What Weissberg (1993) prefers to call *styles of talk* is considered here globally under

delivery to give the holistic impression, in the sense that those elements have their own combinations. Which combination of the elements in the delivery, depended on personal choice of the presenters, timeless and time bound elements. The timeless elements were the more consistent, more permanent features that exist in a delivery and the time bound ones were those more circumstantial and more idiosyncratic. Horowitz and Samuels (1987) described oral academic discourse to be consisting of and shifting between, typically written to typically conversational. Goffman's fresh talk (1981), Dubois's biomedical talks (1980a, 1980b) and Weissberg's graduate seminar (1993) proved similar features. Goffman (1981) described the existence of rehearsed speech and ad-libbing during the delivery to make it a 'fresh talk'. Dubois (1980) and Weissberg (1993) reported memorised, well-rehearsed or even read delivery, even though there were also instances of extemporaneous speeches.

The extemporaneousness of the engineering research presentations was analysed using the three categories outlined by Goffman (1981:171). He categorises the delivery of lectures into three main modes: memorisation, aloud reading and fresh talk. The presentations could not be determined if they could fall neatly into any of Goffman's three categories, because the data presented here depended solely upon what was audio or video recorded. Beyond this, communications with the DC members were limited to what were gathered through questionnaires and interviews **during** the Conference. I could not ask the presenters if they had memorised the presentations. They could not be categorised as fresh talks because they were prepared and thought before. But the presentations were extemporaneous - NS and NN alike, except one NS presenter (C6) who was ironically reading but there were many circumstantial comments, especially because of equipment failure, for instance:

(C6): ((Adjusting computer)) It's not working |+ ((Visual 1: Title and presenter's name)) +++ OK er + I was going to say I + I am (C6) +I am currently er + gosh + present a paper + er + User friendly Environment in the Creation of PDES/STEP Applications |+ Oh gosh |+ This happens to new

technology +++ Right |+ Yes |+ I got some + back-up system + which are very useful here |+

Even though C6 was seen reading or at least referring to his log book more than 50% of the presentation time, especially when he had to talk on the content of his presentation, his 'conversational elements' in the form of 'circumstantial comments' were plenty and could still qualify as extemporaneous. In addition to these transcribed 11 presentations, I remember videotaping a presentation by a NN who was reading 90% of the presentation time. This could be categorised as aloud reading, one of Goffman's categories, as he had almost no circumstantial elements. This instance proved that the delivery of Engineering research presentations are not significantly different from those analysed by Dubois and Weissberg described earlier.

Genre and Genre Expectation

Genre expectations are discussed in relation to the DC's beliefs on what constitute 'good' or 'bad' presentations pointed out earlier under *genre*.. I will compare some of the questionnaire and interview responses presented earlier with the analysis of actual presentations already described. Exploitation of experienced genre user as pointed out by Bhatia (1993) is not pointed out here.

Before I proceed, I would like to mention that the DC's genre expectations were observed to be low, which seem to support Kenny's (1989) non-research observation. Questionnaire responses showed that 5 out of 6 NS general presenter informants and all ten NS audience informants consider their colleagues' presentations have met their profession's expectations; although only 1 out of 3 NS 'good' (according to the audience) speaker informants agree that their DC has a certain kind of expectation on the presenters and the presentations.

I have included the DC's beliefs on 'good' and 'bad' presentations which have connections with *content* , *audio-visual*, *delivery*. and *time*. The responses initiated by these four themes were inter-

related in a cris-cross manner, but let us begin with the discussion with points related to *content*. The responses derived under this theme had to do with clarity. The respondents advised the presenters to leave out irrelevant points and include only those which are relevant. Of course I cannot comment on whether the presenters had actually done this in the 11 research presentations I have analysed because of my ignorance in the technical content. The response on their beliefs on what is considered as 'bad' presentations which was derived under the same theme however, can be discussed as it advised on something connected to time management, i.e. not to cover too large subject in a short *time*.

This actually brought us to discussing responses related to *time*. The responses indicated that finishing the presentation on time, **and** covering the entire paper on time are preferable. H5 who had difficulty in starting himself off did not complete his talk, and many audience considered this a weak point. Another weak point is related to *audio-visual*. According to the questionnaire responses presenters are not to have too many visual, but as reported earlier the visual used in the 20 minute presentations being analysed ranged from 8 to 22. Some members of the audience, indicated that presenters should not change visual too quickly. However if a presenter had 22 visual to show, he would tend to show some of them very quickly to catch up with time. This happened to S9 who changed his transparencies very quickly and made his words very difficult to follow, even when transcribing it.

In the third analysis unit - *delivery*, the responses for this theme were related to 'good pace' which could be affected when a presenter had 22 visuals to show in 20 minutes. In addition to good pace, strong voice was also preferred. In one of the 11 presentations analysed however, when I asked one chairman who he thought would be the best presenter of the session he had chaired, he said M1. The reason given was "finished on time". Upon analysis of M1's presentation however, I found that his words could hardly be distinguished that I had to abandon transcribing it. This was contrary to the belief that 'good'

presenters should have strong voice. Just because he finished his presentation on time the chairman did not make strong or audible, distinguishable presentation obligatory for him before rated him as the best presenter of his session. Spontaneity was pointed as one 'good' criterion and reading as its opposite. Under 'delivery' I have pointed out that 7 of the 11 presentations analysed were delivered spontaneously. One NN presenter whose presentation was not included in the 11 presentations being analysed was reading his presentation aloud and this was not tolerated by the audience as I remember seeing members of the audience leaving the room and bangs of doors were recorded in the tape. The DC's beliefs and what actually take place do not correspond neatly. Each presenter could be rated as 'good' if the audience find him having some or even one criteria of 'good' presentation. A more detail analysis of this issue has to be dealt with somewhere else.

My findings on the genre, structure and delivery of engineering research presentations are still tentative. I have followed Bhatia's suggestions on the general steps in analysing genre (993: 22 - 36), except double checking my findings with the informants including the specialist informants. Huckin and Olsen (1984: 35), noted that 'perhaps the most useful specialist informant one can find for an LSP text is the actual author of the text'. In my context of research, the presenters would be the ideal specialist informant. In addition to these, I presume, informants belonging to Engineering field, though not the presenters themselves, would be an additional asset. Communicating with them was not easy. Very few of the presenters and other related specialist informants returned the transriptions with sufficient comments. The first thing to be done perhaps is to show them the findings and get their feedback. The second thing I have to do is to compare similar data collected in other engineering conferences. Third is to interpret the findings with pedagogical purposes in mind, so that the data could be consumed by materials writers and teachers. With these three steps done, I hope to get a more or less finished product of my research. Meanwhile, I welcome comments and suggestions from interested colleagues.

Acknowledgements: The author would like to thank Betty Lou Dubois for commenting the earlier draft of this article. Weaknesses that remain are the author's own responsibility.

Bibliography

Bakhtin, M. M.. 1986. *Speech Genres and Other Late Essays.* Translated by Vern W. McGee. Austin: University of Texas Press.

Bhatia, Vijay K. 1993. *Analysing Genre.* Language Use in Professional Settings. London and New York: Longman.

Campbell, Paul Newell. 1975. The Personae of Scientific Discourse. *Quarterly Journal of Speech*, vol. 61, December, pp. 391 - 405.

Cooper, C. 1985. *Aspects of Article Introductions In IEEE Publications.* Unpublished M.Sc. dissertation, Aston University.

Crookes, G. 1986. Towards a Validated Analysis of Scientific Text Structure. *Applied Linguistics.* Vol. 7, No. 1, pp. 57-69.

Dubois, B. L. 1980a Genre and Structure of Biomedical Speeches. *Forum Linguisticum.* Vol. 5, pp. 140- 168.

Dubois, BL. 1980b The use of slides in biomedical speeches. English *for Specific Purposes* 1: 45-50.

Dubois, B. L. 1982. Language teaching technology. 'And the last Slide, Please' - Regulatory language function at Biomedical Meetings. *World Language English*, Vol. 1, No 4, pp. 263-268.

Dubois, B. L. 1986. Discussion and Research Notes. Needed: EST Public Communication for Non-Native Speakers of English. *English for specific Purposes*, Vol. 5, No. 1, pp. 73-79.

Dudley-Evans, Tony. 1986. Genre analysis: An investigation of the Introduction and the Discussion Sections of MSc Dissertations, in *Talking about Text* Ed by Malcolm Coulthard. English Language

Monograph University of Birmingham Discourse Analysis monograph number 13 pp. 128-145.

Geertz, Clifford. 1994. Thick description Towards an Interpretative Theory of Culture. In *Readings in the Philosophy of Social Science.* Edited by Michael Martin and Lee C. McIntyre. Bradford Books: MIT Press, pp. 213 - 232.

Goffman, E. 1981. Lecture. In *Forms of Talk.* Philadelphia: University of Pennsylvania Press.

Hatch, Evelyn. 1992. *Discourse and Language Education.* New York: Cambridge University Press.

Horowitz, Rosalind and S. Jay Samuels 1987. Comprehending Oral and Written Language: Critical contrasts for Literacy and Schooling in *Comprehending Oral and Written Language.* Eds. by Horowitz, Rosalind & S. J. Samuels, San Diego: Academic Press, pp. 1 - 52.

Huckin, Thomas N. and Olsen, Leslie A. 1984 June. The Need for Professionally Oriented ESL Instruction in the United States. *TESOL Quarterly,* Vol., 18, No. 2, pp. 273-294.

Hyland, Ken. 1991. Developing Oral Presentation Skills. *English Teaching Forum,* 29, 2, pp. 35 - 37.

Jorgensen, Danny L. 1980. Participant Observation. A methodology for Human Studies. Applied Social Research Methods Series, Volume 15. London: Sage Publications.

Kenny, P. 1982. *A Handbook of Public Speaking for Scientists and Engineers.* Bristol: Adam Hilger.

Lapakko, David Victor Peterson. 1988. *Beliefs About 'Good' Public Speaking : A Study of special theories of Communication and the degree to which they are shared.* PhD. University of Minnesota.

Longacre, Robert E. 1974. Narrative versus other discourse genre. Advances in Tagmemics, Ed by Ruth M. Brend. North-Holland Linguistic Series, Ed. by S. C. Dik and J. g. Kooij. New York: American Elsevier; London: North-Holland.

Nesi, H., and Skelton, J. 1987. The Structure of Oral Presentation. *ESPMENA Bulletin*. Vol. 24, pp. 6-13.

The New Encyclopaedia Britanica. 1993. Ready Reference. Vol. 4 Micropedia. 15 Th. Edition. Chicago etc., p. 496.

The New Encyclopaedia Britannica., 1993. Knowledge in Dept. Vol. 18. Macropedia. 15 Th. Edition. Chicago etc. pp. 414 - 425.

Olsen, Leslie A. and Thomas A. Huckin. 1990. Point-Driven Understanding in Engineering Lecture comprehension. *English for Specific Purposes*, Vol. 9, pp. 33 - 47.

Orr, Joel. 1993. Present or Perish. *CAE Computer Aided Engineering. Vol.* 12, Pt 1 January, p. 54.

Peng, Jingfu. 1987. Organisational features in Chemical Engineering Research Articles. *ELR (English Language Research Journal)*. pt. 1 pp. 79-116.

Saunders, Paul R.1993. January. Successful Project Presentations. Records *Management Quarterly (RMQ)* pp. 26-28.

Saville-Troike, Muriel. 1982. *The Ethnography of Communication: An Introduction.* Baltimore; University Park Press.

Schofield, James. 1988. Presentation Skills and the Language Learner. *Language Training*. Vol. 9, Part 3.

Shalom, Celia. 1993. Established and Evolving Spoken Research Process Genres: Plenary Lecture and Poster Session at Academic Conferences. *English for specific Purposes*. Vol. 12 Number 1, pp. 37-50.

Souillard, Alain and Kerr, Anthony. 1987. Practising Presentations with Science and Technology Students. *English Teaching Forum.* Vol. XXV Pt. 3 pp. 29 - 31.

Swales, John. 1981. *Aspects of Article Introductions* . Aston ESP Research Reports No. 1. The Language Studies Unit, University of Aston in Birmingham.

Swales, John. 1990. *Genre Analysis. English in Academic and Research Settings.* Cambridge: University of Cambridge Press.

Weissberg, B. 1993. The graduate Seminar: Another Research-Process Genre. *English for Specific Purposes*, Vol. 12, pp. 23-35.

Zawadzki, J. and Saunders, P. 1990. Presentation Skills: Learning Lessons from Native Speakers. *Language Training*. Vol. 10, part 4.

Appendix A
Transcription Symbols

1. The + sign follows Strodt-Lopez (1991) : + to indicate a short pause, ++ a long pause, +++ all other longer pauses;

2 The following signs follow Schegloff and Sacks (1973: 327):

( ) to indicate something said but not transcribable;
- to indicate broken word or repeated

3 The following signs were used due to practicality:

| to indicate a falling tone equivalent to a full stop in a written discourse and usually but not necessarily the next sentence following this symbol will begin with a capital letter;
Capital letter beginning a sentence to indicate what seems to be the beginning of a sentence.

Appendix B
The list of research presentations analysed

Number	Presenter	Native Speaker (NS) or Non-Native (NN)
1	M	NS
2	B	NS
3	Mc	NS
4	G	NS
	H	NN
5	H	NS
6	C	NS
7	R	NN
8	C	NS
9	S	NS
10	J	NN
11	H	NN